INDEX TO AUTHORS.

A

Atchley, Dana W. See PALMER, ATCHLEY, and LOEB, 801

B

Baas-Becking, Lourens G. M. The significance of latency time in enzyme determination, 653

Bibb, Lewis. Summation of dissimilar stimuli applied to leaflets of sensitive briar (*Schrankia*), 523

Brody, Samuel. The rate of growth of the domestic fowl, 765

—. The rate of ovulation of the domestic fowl during the pullet year, 431

—, **and Ragsdale, Arthur C.** The rate of growth of the dairy cow. Extrauterine growth in weight, 623

Brooks, Matilda Moldenhauer. Comparative studies on respiration. XIV. Antagonistic action of lanthanum as related to respiration, 337

—. XV. The effect of bile salts and of saponin upon respiration, 527

Brooks, S. C. The kinetics of inactivation of complement by light, 169

—. The mechanism of complement action, 185

C

Carey, Eben J. Studies in the dynamics of histogenesis. II. Tension of differential growth as a stimulus to myogenesis in the esophagus, 61

Clark, W. Mansfield. See ZOLLER and CLARK 325

Cole, W. H. See MOORE and COLE, 331

Coulter, Calvin B. The equilibrium between hemolytic sensitizer and red blood cells in relation to the hydrogen ion concentration, 513

—. The isoelectric point of red blood cells and its relation to agglutination, 309

—. The thermolability of complement in relation to the hydrogen ion concentration, 771

Crozier, W. J. On the rôle of an integumentary pigment in photoreception in *Holothuria*. 57

E

Eckweiler, Herbert, Noyes, Helen Miller, and **Falk, K. George.** The amphoteric properties of some amino-acids and peptides, 291

F

Falk, K. George, and **McGuire, Grace.** Studies on enzyme action. XIX. The sucrolytic actions of bananas, 595

Falk, K. George. See ECKWEILER, NOYES, and FALK, 291

Fenn, Wallace O. The phagocytosis of solid particles. I. Quartz, 439

—. II. Carbon, 465

—. III. Carbon and quartz, 575

Fox, H. Munroe. An investigation into the cause of the spontaneous aggregation of flagellates and into the reactions of flagellates to dissolved oxygen. Part I, 483

—. Part II, 501

—. Methods of studying the respiratory exchange in small aquatic organisms with particular reference to the use of flagellates as an indicator for oxygen consumption, 565

G

Garrey, Walter E. Dynamics of nerve cells. I. The temperature coefficient of the neurogenic rhythm of the heart of *Limulus polyphemus*, 41

—. II The temperature coefficients of carbon dioxide production by the heart ganglion of *Limulus polyphemus*, 49

—. The action of inhibitory nerves on carbon dioxide production in the heart ganglion of *Limulus*, 163

Gortner, Ross Aiken. See HARRIS, GORTNER, and LAWRENCE, 343

Gustafson, F. G. Comparative studies on respiration. XII. A comparison of the production of carbon dioxide by *Penicillium* and by a solution of dextrose and hydrogen peroxide, 35

H

Harris, J. Arthur, Gortner, Ross Aiken, and **Lawrence, John V.** On the differentiation of the leaf tissue fluids of ligneous and herbaceous plants with respect to osmotic concentration and electrical conductivity, 343

Hecht, Selig. Photochemistry of visual purple. I. The kinetics of the decomposition of visual purple by light, 1

—. II. The effect of temperature on the bleaching of visual purple by light, 285

— The relation between the wave-length of light and its effect on the photosensory process 375

—. Time and intensity in photosensory stimulation 367

I

Inman, O. L. Comparative studies on respiration. XVI. Effects of hypotonic and hypertonic solutions upon respiration, 533

—. XVII. Decreased respiration and recovery 663

Irwin, Marian. Comparative studies on respiration. XIII. An apparatus for measuring the production of minute quantities of carbon dioxide by organisms, 203

K

Krafka, Joseph, Jr. Environmental factors other than temperature affecting facet number in the bar-eyed mutant of *Drosophila*, 207

—. The physiological zero: An explanation of the departure from the linear graph of the reaction rate values at the lower temperatures, 659

L

Lawrence, John V. See HARRIS, GORTNER, and LAWRENCE, 343

Lillie, Ralph S. The recovery of transmissivity in passive iron wires as a model of recovery processes in irritable living systems. Part I, 107

—. Part II, 129

—. A simple case of salt antagonism in starfish eggs 783

Loeb, Jacques. Chemical character and physiological action of the potassium ion, 237

—. Chemical and physical behavior of casein solutions, 547

—. Colloidal behavior of proteins, 557

—. Donnan equilibrium and the physical properties of proteins. I. Membrane potentials, 667

—. II. Osmotic pressure, 691

—. III. Viscosity, 827

—. Further observations on the production of parthenogenetic frogs, 539

—. Ion series and the physical properties of proteins. I, 85

—. Ion series and the physical properties of proteins. II, 247

—. III. The action of salts in low concentration, 391

Loeb, Robert F. Radioactivity and physiological action of potassium, 229

—. See PALMER, ATCHLEY and LOEB. 801

M

Maxwell, S. S. Labyrinth and equilibrium. III. The mechanism of the static functions of the labyrinth, 157

McGuire, Grace. See FALK and MCGUIRE. 595

Moore, A. R., and **Cole, W. H.** The response of *Popillia japonica* to light and the Weber-Fechner law, 331

N

Northrop, John H. The rôle of the activity coefficient of the hydrogen ion in the hydrolysis of gelatin, 715

—. The significance of the hydrogen ion concentration for the digestion of proteins by pepsin, 211

du Noüy, P. Lecomte. Energy and vision, 743

Noyes, Helen Miller. See ECKWEILER, NOYES, and FALK, 291

O

Osterhout, W. J. V. The mechanism of injury and recovery, 15

—. A theory of injury and recovery. I. Experiments with pure salts, 145

—. II. Experiments with mixtures, 415

—. III. Repeated exposures to toxic solutions, 611

P

Palmer, Walter W., Atchley, Dana W., and **Loeb, Robert F.** Studies in the regulation of osmotic pressure. I. The effect of increasing concentrations of gelatin on the conductivity of a sodium chloride solution, 801

Pézard, A. Numerical law of regression of certain secondary sex characters, 271

Pond, Samuel Ernest. Correlation of the propagation-velocity of the contraction-wave in muscle with the electrical conductivity of the surrounding medium, 807

R

Ragsdale, Arthur, C. See BRODY and RAGSDALE. 623

S

Schmitz, Henry. Studies in wood decay. II. Enzyme action in *Polyporus volvatus* Peck and *Fomes igniarius* (L.) Gillet. 795

Shaw, Roscoe H. See SHERMAN and SHAW. 657

Sherman, James M., and **Shaw, Roscoe H.** Associative bacterial action in the propionic acid fermentation, 657

Smith, Theobald, and **Smith, Dorothea E.** Inhibitory action of paratyphoid bacilli on the fermentation of lactose by *Bacillus coli*. I, 21

Smith, Dorothea E. See SMITH and SMITH, 21

U

Uhlenhuth, Eduard. Experimental production of gigantism by feeding the anterior lobe of the hypophysis, 347

Z

Zoller, Harper F. Casein viscosity studies, 635

— and **Clark, W. Mansfield.** The production of volatile fatty acids by bacteria of the dysentery group 325

INDEX TO SUBJECTS

A

Acid:
Propionic, associative bacterial action in fermentation (SHERMAN and SHAW) 657
Volatile fatty, production of, by bacteria of dysentery group (ZOLLER and CLARK) 325

Action:
Antagonistic, of lanthanum as related to respiration (BROOKS) 337
Complement, mechanics of (BROOKS) 185
Physiological, of potassium (LOEB) 229

Agglutination:
Relation of isoelectric point of red blood cells to (COULTER) 309

Amino-acids:
Amphoteric properties (ECKWEILER, NOYES, and FALK) 291

Antagonism:
Salt, in starfish eggs (LILLIE) 783

Apparatus:
Measuring the production of minute quantities of carbon dioxide by organisms (IRWIN) 203

B

Bacillus:
coli, fermentation of lactose by, inhibitory action of paratyphoid bacilli (SMITH and SMITH) 21
Paratyphoid. *See* Paratyphoid.

Bacteria:
Dysentery group, production of volatile acids by (ZOLLER and CLARK) 325

Bacterial action:
Associative, in the propionic acid fermentation (SHERMAN and SHAW) 657

Banana:
Sucrolytic actions of (FALK and MCGUIRE) 595

Bile:
Salts, effect upon respiration (BROOKS) 527

Bleaching:
Visual purple by light, effect of temperature on (HECHT) 285

Blood:
See Erythrocyte.

C

Carbon:
Phagocytosis of (FENN) 465
— of carbon and quartz (FENN) 575

Carbon dioxide:
Production by heart ganglion of *Limulus polyphemus*, temperature coefficients of (GARREY) 49
— in heart ganglion of *Limulus*, action of inhibitory nerves on (GARREY) 163
— of, by *Penicillium* (GUSTAFSON) 35
— —, by solution of dextrose and hydrogen peroxide (GUSTAFSON) 35

Carbon dioxide—*continued:*
Production of minute quantities of, by organisms, apparatus for measuring (IRWIN) 203
Casein:
Solutions, chemical behavior of (LOEB) 547
—, physical behavior of (LOEB) 547
Viscosity studies (ZOLLER) 635
Cell:
Equilibrium between red blood cells and hemolytic sensitizer in relation to hydrogen ion concentration (COULTER) 513
Nerve, dynamics of (GARREY) 41, 49
Red blood, isoelectric point (COULTER) 309
Chemistry:
Chemical behavior of casein solutions (LOEB) 547
— character of potassium ion (LOEB) 237
Chloride:
Sodium, *See* Sodium.
Coefficient:
Activity, of hydrogen ion in hydrolysis of gelatin (NORTHROP) 715
Temperature, of carbon dioxide production by heart ganglion of *Limulus polyphemus* (GARREY) 49
—, — neurogenic rhythm of heart of *Limulus polyphemus* (GARREY) 41
Coli:
Bacillus, fermentation of lactose by, inhibitory action of paratyphoid bacilli (SMITH and SMITH) 21
Colloid:
Colloidal behavior of proteins (LOEB) 557
Complement:
Action, mechanism of (BROOKS) 185
Inactivation of, by light, kinetics of (BROOKS) 169
Thermolability of, in relation to the hydrogen ion concentration (COULTER) 771
Concentration:
Gelatin, effect on conductivity of a sodium chloride solution (PALMER, ATCHLEY, and LOEB) 801
Hydrogen ion, thermolability of complement in relation to (COULTER) 771
Low, action of salts in (LOEB) 391
Osmotic, differentiation of leaf tissue fluids of herbaceous plants with respect to (HARRIS, GORTNER and LAWRENCE) 343
—, — — leaf tissue fluids of ligneous plants with respect to (HARRIS, GORTNER, and (LAWRENCE 343
Conductivity:
Correlation of the propagation-velocity of the contraction-wave in muscle with the electrical conductivity of the surrounding medium (POND) 807
Electrical, differentiation of leaf tissue fluids of herbaceous plants with respect to (HARRIS, GORTNER, and LAWRENCE) 343
—, — — leaf tissue fluids of ligneous plants with respect to (HARRIS, GORTNER, and LAWRENCE) 343
Sodium chloride solution, effect of increasing concentrations of gelatin on (PALMER, ATCHLEY, and LOEB) 801

Correlation:
Of propagation-velocity of contraction-wave in muscle with electrical conductivity of surrounding medium (POND) 807

D

Dairy cow:
Rate of growth of, (BRODY and RAGSDALE) 623
Decay:
Wood (SCHMITZ) 775
Dextrose:
Production of carbon dioxide by (GUSTAFSON) 35
Differentiation:
Leaf tissue fluids of herbaceous plants with respect to electrical conductivity (HARRIS, GORTNER, and LAWRENCE) 343
— — — of herbaceous plants with respect to osmotic concentration (HARRIS, GORTNER, and LAWRENCE) 343
— — — of ligneous plants with respect to electrical conductivity (HARRIS, GORTNER, and LAWRENCE) 343
— — — of ligneous plants with respect to osmotic concentration (HARRIS, GORTNER, and LAWRENCE) 343
Digestion:
Proteins by pepsin, significance of hydrogen ion concentration for (NORTHROP) 211
Domestic fowl:
Rate of growth of (BRODY) 765
— — ovulation in (BRODY) 431
Donnan:
Equilibrium. *See* equilibrium.
Donnan equilibrium:
(LOEB) 667, 691, 827
Drosophila:
Bar-eyed mutant of, effect of environmental factors other than temperature on (KRAFKA) 207
Dynamics:
Histogenesis (CAREY) 61
Nerve cells (GARREY) 49
Dysentery:
Bacteria of, production of volatile fatty acids by (ZOLLER and CLARK) 325

E

Egg:
Starfish, salt antagonism in (LILLIE) 783
Enzyme:
Action (FALK and MCGUIRE) 595
— in *Fomes igniarius* (L.) Gillet (SCHMITZ) 795
— — *Polyporus volvatus* Peck (SCHMITZ) 795
Determination, latency time in (BAAS-BECKING) 653
Equilibrium:
Donnan (LOEB) 677, 691, 827
(MAXWELL) 157
Hemolytic sensitizer and red blood cells in relation to hydrogen ion concentration (COULTER) 513
Erythrocyte:
Equilibrium between hemolytic sensitizer and red blood cells in relation to hydrogen ion concentration (COULTER) 513
Esophagus:
Tension of differential growth as stimulus to myogenesis in (CAREY) 61

Exposure:
Repeated, to toxic solutions (OSTERHOUT) 611
Extrauterine:
Growth, in weight (BRODY and RAGSDALE) 623

F

Facet:
Number, effect of environmental factors other than temperature on, in bar-eyed mutant of Drosophila (KRAFKA) 207
Factor(s):
Environmental, other than temperature, affecting facet number in the bar-eyed mutant of Drosophila (KRAFKA) 207
Feeding:
Anterior lobe of hypophysis, experimental production of gigantism by (UHLENHUTH) 347
Fermentation:
Lactose by *Bacillus coli*, inhibitory action of paratyphoid bacilli on (SMITH and SMITH) 21
Propionic acid, associative bacterial action in (SHERMAN and SHAW) 657
Flagellate(s):
Cause of spontaneous aggregation of (FOX) 483, 501
Use of, as an indicator for oxygen consumption (FOX) 565
Reaction to dissolved oxygen (FOX) 483, 501
Fluid:
Leaf tissue, of herbaceous plants, differentiation of, with respect to electrical conductivity (HARRIS, GORTNER, and LAWRENCE) 343
Fluid—*continued:*
Leaf tissue, of herbaceous plants, differentiation of, with respect to osmotic concentration (HARRIS, GORTNER, and LAWRENCE) 343
— —, — ligneous plants, differentiation of, with respect to electrical conductivity (HARRIS, GORTNER, and LAWRENCE) 343
— —, — ligneous plants, differentiation of, with respect to osmotic concentration (HARRIS, GORTNER, and LAWRENCE) 343
Fomes:
ignarius (L.) Gillet, Enzyme action in (SCHMITZ) 795
Fowl:
Domestic, rate of growth of (BRODY) 765
—, — — ovulation during the pullet year (BRODY) 431
Frog:
Production of parthenogenetic frogs (LOEB) 539
Function:
Static, of labyrinth, mechanism of (MAXWELL) 157

G

Ganglion:
Heart, of *Limulus polyphemus*, temperature coefficients of carbon dioxide production by (GARREY) 49
—, — —, action of inhibitory nerves on carbon dioxide production in (GARREY) 163
Gelatin:
Concentrations of, effect on electrical conductivity of sodium chloride solution (PALMER, ATCHLEY, and LOEB) 801

Gelatin—*continued:*
Hydrolysis of, activity coefficient of hydrogen ion in, (NORTHROP) 715
Gigantism:
Experimental production of, by feeding anterior lobe of hypophysis (UHLENHUTH) 347
Graph:
Linear, departure of reaction rate values from (KRAFKA) 659
Growth:
Differential tension of, as stimulus to myogenesis in esophagus (CAREY) 61
Extrauterine, in weight, (BRODY and RAGSDALE) 623
Rate, of dairy cow (BRODY and RAGSDALE) 623
—, — domestic fowl (BRODY) 765

H

Heart:
Ganglion of *Limulus*, action of inhibitory nerves on carbon dioxide production in (GARREY) 163
— — — *polyphemus*, temperature coefficients of carbon dioxide production by (GARREY) 49
Limulus polyphemus, temperature coefficient of neurogenic rhythm of (GARREY) 41
Hemolysis:
Hemolytic sensitizer and red blood cells in relation to hydrogen ion concentration (COULTER) 513
Histogenesis:
Dynamics of (CAREY) 61
Holothuria:
Photoreception in, rôle of integumentary pigment (CROZIER) 57
Hydrogen ion:
Coefficient, in hydrolysis of gelatin (NORTHROP) 715
Concentration, equilibrium between hemolytic sensitizer and red blood cells in relation to (COULTER) 513
—, significance of, for digestion of proteins by pepsin (NORTHROP) 211
—, thermolability of complement in relation to (COULTER) 771
Hydrogen peroxide:
Production of carbon dioxide by (GUSTAFSON) 35
Hydrolysis:
Gelatin, activity coefficient of hydrogen ion in (NORTHROP) 715
Hypertonic solution:
See Solution.
Hypophysis:
Anterior lobe of, experimental production of gigantism by feeding (UHLENHUTH) 347
Hypotonic solution:
See Solution.

I

Igniarius:
Fomes, enzyme action in (SCHMITZ) 795
Inactivation:
Complement by light, kinetics of (BROOKS) 169
Indicator:
Use of flagellates as, for oxygen consumption (FOX) 565
Injury:
Mechanism (OSTERHOUT) 15
Theory of (OSTERHOUT) 145, 415, 611

Integument:
Rôle of integumentary pigment in photoreception in *Holothuria* (CROZIER) 57
Intensity:
Photosensory stimulation (HECHT) 367
Ion:
Potassium, chemical character (LOEB) 237
—, physiological action of (LOEB) 237
Series (LOEB) 85, 247, 391
Iron:
Wires, passive, recovery of transmissivity in, as model of recovery processes in irritable living systems (LILLIE) 107, 129
Isoelectric point:
Red blood cells (COULTER) 309
— — —, relation to agglutination (COULTER) 309

J

Japonica:
Popillia, response to light (MOORE and COLE) 331

K

Kinetics:
Decomposition of visual purple by light (HECHT) 1
Inactivation of complement by light (BROOKS) 169

L

Labyrinth:
(MAXWELL) 157
Mechanism of static functions of (MAXWELL) 157
Lactose:
Fermentation by *Bacillus coli*, inhibitory action of paratyphoid bacilli (SMITH and SMITH) 21
Lanthanum:
Antagonistic action of, as related to respiration (BROOKS) 337
Latency:
Time, in enzyme determination (BAAS-BECKING) 653
Law:
Numerical, of regression of certain secondary sex characters (PÉZARD) 271
Weber-Fechner (MOORE and COLE) 331
Leaflets:
Sensitive briar (*Schrankia*), summation of dissimilar stimuli applied to (BIBB) 523
Light:
Bleaching of visual purple by, effect of temperature (HECHT) 285
Inactivation of complement by, kinetics of (BROOKS) 169
Kinetics of the decomposition of visual purple by (HECHT) 1
Relation between wave-length of, and its effect on photosensory process (HECHT) 375
Response of *Popillia japonica* to (MOORE and COLE) 331
Limulus:
Heart ganglion of, action of inhibitory nerves on carbon dioxide production in (GARREY) 163
polyphemus temperature coefficients of carbon dioxide production by heart ganglion of (GARREY) 49
—, — coefficient of neurogenic rhythm of heart of (GARREY) 41

Lobe:
Anterior, of hypophysis, experimental production of gigantism by feeding (UHLENHUTH) 347

M

Mechanism:
Complement action (BROOKS) 185
Injury (OSTERHOUT) 15
Recovery (OSTERHOUT) 15
Static functions of the labyrinth (MAXWELL) 157
Medium:
Surrounding, correlation of propagation-velocity of the contraction-wave in muscle with the electrical conductivity of (POND) 807
Membrane:
Potentials (LOEB) 667
Mixture(s):
Experiments with (OSTERHOUT) 415
Muscle:
Contraction-wave, propagation-velocity of (POND) 807
Mutant:
Bar-eyed, of *Drosophila*, effect of environmental factors other than temperature on (KRAFKA) 207
Myogenesis:
Tension of differential growth as stimulus to, in esophagus (CAREY) 61

N

Nerve:
Cells, dynamics of (GARREY) 41, 49
Inhibitory, action of, on carbon dioxide production in heart ganglion of *Limulus* (GARREY) 163

O

Organism:
Aquatic, methods of studying respiratory exchange in (FOX) 565
Production of minute quantities of carbon dioxide by, apparatus for measuring (IRWIN) 203
Osmosis:
Osmotic pressure (LOEB) 691
Osmotic pressure:
(LOEB) 691
Regulation of (PALMER, ATCHLEY, and LOEB) 801
Ovulation:
Domestic fowl, rate during pullet year (BRODY) 431
Oxygen:
Consumption, use of flagellates as an indicator for, (FOX) 565

P

Paratyphoid:
Bacilli, inhibitory action on fermentation of lactose by *Bacillus coli* (SMITH and SMITH) 21
Parthenogenesis:
Production of parthenogenetic frogs (LOEB) 539
Particle(s):
Solid carbon, phagocytosis of (FENN) 465
—, — and quartz, phagocytosis of (FENN) 575
—, quartz phagocytosis of (FENN) 439
Penicillium:
Production of carbon dioxide by (GUSTAFSON) 35
Pepsin:
Digestion of protein by, significance of hydrogen ion concentration for (NORTHROP) 211

Peptides:
Amphoteric properties (ECKWEILER, NOYES, and FALK) 291
Phagocytosis:
Solid particles (FENN) 439, 465, 575
Photochemistry:
Visual purple (HECHT) 1, 285
Photoreception:
Rôle of integumentary pigment, in *Holothuria* (CROZIER) 57
Photosensory:
Process, relation between wave-length of light and its effect on (HECHT) 375
Physics:
Physical behavior of casein solutions (LOEB) 547
Physiology:
Physiological action of potassium (LOEB) 229
— — — — ion (LOEB) 237
— zero (KRAFKA) 659
Pigment:
Integumentary, rôle in photoreception, in *Holothuria* (CROZIER) 57
Plant:
Herbaceous, differentiation of leaf tissue fluids of, with respect to electrical conductivity (HARRIS, GORTNER, and LAWRENCE) 343
—, — of leaf tissue fluids of, with respect to osmotic concentration (HARRIS, GORTNER, and LAWRENCE) 343
Ligneous, differentiation of leaf tissue fluids of, with respect to electrical conductivity (HARRIS, GORTNER, and LAWRENCE) 343
Plant—*continued:*
Ligneous, differentiation of leaf tissue fluids of, with respect to osmotic concentration (HARRIS, GORTNER, and LAWRENCE) 343
Polyphemus:
Limulus, temperature coefficient of carbon dioxide production by heart ganglion of (GARREY) 49
—, — coefficient of neurogenic rhythm of heart of (GARREY) 41
Polyporus:
volvatus Peck, enzyme action in (SCHMITZ) 795
Popillia:
japonica, response to light (MOORE and COLE) 331
Potassium:
Ion, chemical character (LOEB) 237
—, physiological action (LOEB) 237
Physiological action (LOEB) 229
Radioactivity (LOEB) 229
Potential:
Membrane (LOEB) 667
Production:
Carbon dioxide, in heart ganglion of *Limulus*, action of inhibitory nerves on (GARREY) 163
Minute quantities of carbon dioxide by organisms, apparatus for measuring (IRWIN) 203
Propagation-velocity:
Contraction-wave, in muscle (POND) 807
Property:
Amphoteric, of amino-acids (ECKWEILER, NOYES, and FALK) 291

Property—*continued:*
Amphoteric, of peptides (ECKWEILER, NOYES, and FALK) 291
physical, of proteins (LOEB) 85, 247, 391, 667, 691, 827
Protein:
Physical properties and Donnan equilibrium (Loeb) 667, 691, 827
Colloidal behavior of (LOEB) 557
Digestion of, by pepsin, significance of hydrogen ion concentration for (NORTHROP) 211
Physical properties (LOEB) 85, 247, 391, 667, 691, 827
Pullet:
Rate of ovulation in domestic fowl during pullet year (BRODY) 431
Purple:
Visual, photochemistry, of (HECHT) 1, 285
—, effect of temperature on bleaching of (HECHT) 285

Q

Quartz:
Phagocytosis of (FENN) 439
— — carbon and quartz (FENN) 575

R

Radioactivity
Potassium (LOEB) 229
Rate:
Growth, of dairy cow, (BRODY and RAGSDALE) 623
—, — domestic fowl (BRODY) 765
Reaction, values, departure from linear graph (KRAFKA) 659
Reaction:
Flagellates, to dissolved oxygen (FOX) 483, 501
Rate, departure of values from linear graph (KRAFKA) 659
Recovery:
Decreased respiration and (INMAN) 663
Mechanism (OSTERHOUT) 15
Processes in irritable living systems, recovery of transmissivity in passive iron wires as model of (LILLIE) 107, 129
Theory of (OSTERHOUT) 145, 415, 611
Transmissivity in passive iron wires as model of recovery processes in irritable living systems (LILLIE) 107, 129
Regression:
Certain secondary sex characters, numerical law (PÉZARD) 271
Respiration:
(BROOKS) 337, 527
(GUSTAFSON) 35
(INMAN) 533, 663
(IRWIN) 203
Antagonistic action of lanthanum as related to (BROOKS) 337
Decreased (INMAN) 663
Effect of bile salts upon (BROOKS) 527
— — saponin upon, (BROOKS) 527
Effects of hypertonic solutions upon (INMAN) 533
— — hypotonic solutions upon (INMAN) 533
Methods of studying respiratory exchange in small aquatic organisms (FOX) 565

Response:
Popillia japonica, to light (MOORE and COLE) 331
Rhythm:
Neurogenic, of heart of *Limulus polyphemus* temperature coefficient (GARREY) 41

S

Salt:
Antagonism, in starfish eggs (LILLIE) 783
Salt(s):
Action in low concentration (LOEB) 391
Pure, experiments with (OSTERHOUT) 145
Schrankia:
Summation of dissimilar stimuli applied to leaflets of (BIBB) 523
Sensitive briar:
See *Schrankia*.
Sensitizer:
Equilibrium between hemolytic sensitizer and red blood cells in relation to hydrogen ion concentration (COULTER) 513
Sex:
Secondary characters, numerical law of regression (PÉZARD) 271
Sodium:
Chloride, solution, effect of increasing concentration on conductivity of (PALMER, ATCHLEY, and LOEB) 801
Solution:
Casein, chemical behavior of (LOEB) 547
—, physical behavior of (LOEB) 547
Hypertonic, effects upon respiration (INMAN) 533
Solution—*continued:*
Hypotonic, effects upon respiration (INMAN) 533
Repeated exposures to toxic solutions (OSTERHOUT) 611
Sodium chloride, effect of increasing concentrations on conductivity of (PALMER, ATCHLEY, and LOEB) 801
Starfish:
Eggs, salt antagonism in (LILLIE) 783
Stimulation:
Photosensory, intensity in (HECHT) 367
—, time in (HECHT) 367
Stimulus:
Dissimilar stimuli, summation of, applied to leaflets of sensitive briar (*Schrankia*) (BIBB) 523
Tension of differential growth as, to myogenesis in esophagus (CAREY) 61
Summation:
Dissimilar stimuli, applied to leaflets of sensitive briar (*Schrankia*) (BIBB) 523
Systems:
Irritable living, recovery of transmissivity in passive iron wires as model of recovery process in (LILLIE) 107, 129

T

Temperature:
Coefficients, of carbon dioxide production by heart ganglion of *Limulus polyphemus* (GARREY) 49
—, coefficient, neurogenic rhythm of heart of *Limulus polyphemus* (GARREY) 41

Temperature—*continued:*
Effect on bleaching of visual purple by light (HECHT) 285
Environmental factors other than, affecting facet number in the bar-eyed mutant of *Drosophila* (KRAFKA) 207
Lower, departure of reaction rate values from the linear graph at (KRAFKA) 659

Tension:
Differential growth as a stimulus to myogenesis in the esophagus (CAREY) 61

Thermolability:
Of complement, in relation to the hydrogen ion concentration (COULTER) 771

Time:
Latency, in enzyme action (BAAS-BECKING) 653
Photosensory stimulation (HECHT) 367

Transmissivity:
Recovery in passive iron wires as a model of recovery processes in irritable living systems (LILLIE) 107, 129

V

Viscosity:
(LOEB) 827
Casein (ZOLLER) 635

Visual purple:
Kinetics of decomposition of, by light (HECHT) 1
Photochemistry of (HECHT) 1

Volvatus:
Polyporus, enzyme action in (SCHMITZ) 795

W

Wave-length:
Light, relation between, and its effect on photosensory process (HECHT) 375

Weber-Fechner:
Law (MOORE and COLE) 331

Wire:
Passive iron, recovery of transmissivity in, as model of recovery processes in irritable living systems (LILLIE) 107, 129

Wood:
Decay (SCHMITZ) 795

Z

Zero:
Physiological (KRAFKA) 659